

REMARKS**Status of Claims**

The Office Action mailed March 1, 2004 has been reviewed and the comments of the Patent and Trademark Office have been considered. Claims 1-9 were pending in the application. Claims 1, 8, and 9 have been amended and no claims have been canceled or newly added. Applicants respectfully request entry of this amendment and reconsideration because it is believed to place the application in condition for allowance. Furthermore, applicants submit that the instant amendment does not raise any new issues since it clarifies arguments presented earlier.

This amendment changes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, are presented, with an appropriate defined status identifier.

Rejection under 35 U.S.C. § 102

In the Office Action, claims 1-4 and 7-9 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,621,304 to Kiuchi et al. (hereafter "Kiuchi"). Claims 5 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kiuchi in view of U.S. patent No. 6,215,198 to Inada et al. (hereafter "Inada"). Applicants respectfully traverse these rejections for at least the following reasons.

Each of the independent claims 1, 8, and 9 recite, *inter alia*, that a control system (or method) for a vehicle computes an available battery output from the battery to a motor based on the target motor power, where the available battery output is the power that is actually outputtable by the battery which varies according to a voltage applied to the motor. See, for example, paragraphs [0008], [0040-0041], and [0050] in the present specification. At least this recited feature is not disclosed or suggested by the applied prior art.

Specifically, the Office Action erroneously asserts that Kiuchi discloses the feature "compute an available output from the battery to the motor based on the target motor power (5)" (last two lines in page 2 of the Office Action). The cited motor energy supply controller 5 only controls the supply of electric energy from the battery to the motor 4, but it does not compute the available battery power (lines 4-8 in column 7 of Kiuchi). The Office Action asserts that the supply of electric energy of Kiuchi corresponds to the available battery power

(item 9 in page 5 of the Office Action). However, the supply of electric energy is different from the computed available battery power (which is an outputtable battery power that varies according to the voltage applied to the motor and is computed based on the target motor power) because Kiuchi does not compute the available battery power based on the voltage applied to the motor. As explained in paragraph [0008] of the specification, if the generated power is reduced without considering the power that can actually be output from the battery, the available power from the battery may not be enough to supply the motor power required by a driver.

Furthermore, Kiuchi discloses an effective maximum output P_{max} computed by the effective maximum output calculating unit 15. However, the effective maximum output P_{max} also differs from the claimed available battery power, since it is calculated as the product of the minimum drive voltage V_i and the current I_i at the minimum drive voltage (lines 45-54 in column 7) without considering the target motor power. The effective maximum output P_{max} is only used to determine whether to activate engine controller 18 and the generator controller 20 by comparing with the predetermined required maximum output P_{motor} for the motor 4.

To summarize, the claimed invention computes the available battery output based on the target motor power. The available battery power varies according to the voltage applied to the motor. For example, when the voltage applied to the motor increases, the available battery power decreases. Therefore, in the claimed invention, the available battery power is computed precisely by considering the target motor power, which varies according to the voltage applied to the motor. Therefore, the target generated power is computed based on the available battery power, so the shortage of power supply can be effectively prevented.

Therefore, neither the claimed features nor their advantages are disclosed or suggested by Kiuchi.

Furthermore, these deficiencies in Kiuchi are not cured by any of the other applied references. Therefore, the pending independent claims are believed to be allowable over the applied prior art.

The dependent claims are also patentable for at least the same reasons as the respective independent claims on which they ultimately depend. In addition, they recite additional patentable features when considered as a whole.

Conclusion

In view of the foregoing amendments and remarks, applicants respectfully submit that the application is now in condition for allowance. An early notice to this effect is earnestly solicited. If there are any questions regarding the application, or if an examiner's amendment would facilitate the allowance of one or more of the claims, the examiner is invited to contact the undersigned attorney at the local telephone number below.

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge deposit account No. 19-0741 for any such fees; and applicants hereby petition for any needed extension of time.

Respectfully submitted,

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